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(12) United States Patent

Mesallum

(54) SYSTEM FOR PRODUCING CONTINUOUS MECHANICAL ENERGY TO TREAT HEART FAILURE WITHOUT THE USE OF EXTERNAL ENERGY SOURCE

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(57) ABSTRACT

Described are aspects and embodiments directed to systems for tapping into the breathing system to generate pressure in a sustained space with pulsating frequency to aid the pumping functions of cardiac muscle. In some embodiments, the generated energy can also be transferred to other forms of energy (e.g., electricity to power certain devices (e.g., pacemaker batteries). In further embodiments, the system utilizes air entrapment in a closed space to generate mechanical force with valves and timed release frequency to control power generation and mechanical movements that assist blood flow.

16 Claims, 7 Drawing Sheets

